

Please cite:

```
/tmp/fastacaaQPaiHi: 995 aa
```

>SEO ID NO:2

```
vs /tmp/fastDAARPaHi library
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searching /tmp/fastDAARPaHi library
```

1008 residues in 1 sequences

FASTA (3.34 January 2000) function [optimized, BL50 matrix (15:-5)] ktup: 2

```

join: 39, opt: 27, gap-pen: -12/ -2, width: 16

```

Scan time: 0.050

The best scores are:

opt

NM 000096 ACCESSION:NM_000096 NID: gi 4557484 ref (1008) 2671

>>NM_000096 ACCESSION:NM_000096 NID: qi_4557484 ref NM_0 (1008 aa)

```
initn: 1414 init1: 972 opt: 2671
```

Smith-Waterman score: 3980; 57.002% identity in 1014 aa overlap (1-992:1-1008)

```

          10          20          30          40          50
SEQ      MKILILGIFLFLCSPGWAIDRHCYIGIEESIWNYPAGSKNMLNEKPFSEDL-----FLQ
          ::::::::::::::: .: .: .: .: .: .: .: .: .: .: .: .: .: .: .:
NM_000   MKILILGIFLFLCSTPAWAKEKHYYIGIIEETWDYA--SDHGKKLISVDTEHSNIYLQ
          10          20          30          40          50

```

	60	70	80	90	100	110
SEQ	GGQARKSFVFKKALYFQYTDNTFQR	II EKPSWLGFLGPMIKAETGDFIYVHV	KNNASRAY			
	.:	:	:	:	:	:
NM_000	NGPDRIGRLYKKALYDQYTDFTTIEKPV	WLGFLGPIIKAETGDKVYVHLKNLASRPY				
	60	70	80	90	100	110

	120	130	140	150	160	170
SEQ	SYPHPLGLTYSKENEAHGAIYPDNTTGLQKEVEYLEPGKQYTYKWVVEEHQGPGPNDSNCV					
	. . . : . . . : . . . : . . . : . . . : . . . : . . . : . . . :					
NM_000	TFHSHGITYYKEHE--GAIPDNTTDFQRADDKVPYGEQYTYMLLATEEQSPGEGDGNCV					
	120	130	140	150	160	170

	180	190	200	210	220	230
SEQ	TRIIYSHIDTARDVASGLIGPILTCRGT	LN	GDTEK	IDRSSFL	MFSTTDES	RSWYSDEN

NM_000	TRIIYSHIDAPKD	IASGLIGPLI	ICKDSLDKE	KEKHIDREF	VVMFVS	VVDENFSWYLEDN
	180	190	200	210	220	230

	240	250	260	270	280	290
SEQ	IRAF-TESGKINTSDPRFEESMSMQSINGYIYGNLPNLT	TMCAEDRVQWYFVGMGGVADIH				
	...	:	.	.	.	:
	:	:	:	:	:	:
NM_000	IKTYCSEPEKVDKDNE	DFQESNRMYSVNGYTF	GSLPGLSMCAEDRV	KWYLF	FGMGNEVDVH	
	240	250	260	270	280	290

	300	310	320	330	340	350
SEQ	PVYLRGQTLISRNHRKDTIMLFPSSLEDAFMVAKAPGVWMLGCQ----	IHESMQAFFKVS				

NM_000	AAFFHGQALTNKNYRIDTINLFPATLFDAYMVAQNPGEWMLSCQNLNHLKAGLQAFFQVQ					
	300	310	320	330	340	350

	360	370	380	390	400	410
SEQ	NCQKPSTEAFVTGTHVIHYIIAAKEILWNYAPSGIDFFTKKNLTAAGSKSQLFFERSPTR					
	:	:
NM_000	ECNKSSSKDNIRGKHVRHYIIAAEEIIWNYAPSGIDIFTKENLTAPGSDSAVFFEQGTTR					
	360	370	380	390	400	410

	420	430	440	450	460
SEQ	IGGTYKKLIYREYTDASFQTQKAR---EEHLGILGPVFKAEVQGTTIKITFYNNASLPLSI				
	:
NM_000	IGGSYKKLVYREYTDASFQTNRKERGPEEEHLGILGPVIWAEVGDITRVTFHNKGAYPLSI				
	420	430	440	450	460

	470	480	490	500	510	520
SEQ	QPPGLHYNKSNEGLFYE---TPGG-STPPPSHHVSPGTTTFVYTWEVPKDVGPTSTDPNCL					

NM_000	EPIGVRFNKNNEGTYYSPPNYNPQSRSVPPSASHVAPTETFTTYEWTVPKEVGPTNADPVCL					
	480	490	500	510	520	530

	530	540	550	560	570	580
SEQ	TWFFYSSVNGKKDINSGLLGPLLICRNGSLGDDGKQKGVDFEYLLATIFDENESNLLDE					

NM_000	AKMYSAVDPTKDIPTGLIGPMKICKKGSLSHANGRQKDVDFEYLLFPTVFDENESLLED					
	540	550	560	570	580	590

	590	600	610	620	630	640
SEQ	N-RTFITEPENIDKEDTDCQASNKMYSSINGMYGNLPGLDTCLGDNVLWHVFSVGSVEDL					
	:	:	:	:	:	..
NM_000	NIRMFTTAPDQVDKEDEDFQESNKMMSMNGFMYGNQPGLTMCCKGDSVVWYLFSGNEADV					
	600	610	620	630	640	650

	650	660	670	680	690	700
SEQ	HGIYFSGNTFTSLGARRDTIPMFYTSQTLLMTPDSIGTFDLVCMTIKHNLGGMKHKYHV					
	:
NM_000	HGIYFSGNTYLRGERRDANLFPQTSLLHMPDTEGTFNVECLTTDHYTGGMKQKYTV					
	660	670	680	690	700	710

	710	720	730	740	750	760
SEQ	RQCGKPNPDQTYQEEKIIITIAAEEMEWYDYSRKRWENELHHLRRENQTSMYVDRSGTL					
	::
NM_000	NQCRQSEDSTFYLGERTYY-IAAVEVEWDYSPQREWEKELHHLQEQNVSNFLDKGEFY					
	720	730	740	750	760	770

	770	780	790	800	810	820
SEQ	LGSKYKKVLYRQYDDNTFTNQTKRNEGEKHLDDLGPLILLNPGQIIQIIFKNKAARPYSI					

NM_000	IGSKYKKVVYRQYTDSTFRVPVERKAEEEHLGILGPQLHADVGDKVKIIFKNMATRPYSI					
	780	790	800	810	820	830

	830	840	850	860	870	880
SEQ	HAHGVTNNSTVVPTQPGEIQIYTQIPDRGTGPTSLDFECIPWFYYSTVSVAKDLHSGLV					

NM_000	HAHGVTQTESSTVPTLPGETLTYVWKIPERSGAGTEDSACIPWAYYSTVDQVKDLYSGLI					
	840	850	860	870	880	890

	890	900	910	920	930
SEQ	GPLSVCR----	KDINPN-IVHRLVLFHMIFDENESWYFEDSINTYASKPNKVDKENDNFQL			
NM_000	::: :::	: .::	. . : :	:	:
	900	910	920	930	940
					950
	940	950	960	970	980
SEQ	SNQMHAINGRFLFGNNQGITFHVGDVVNWYLIGIGNEADLHTVHFHGHSFEYKHXYLI				
NM_000	::::::::::::::	::::::::::::::	::::::::::::::	::::::::::::::	::::::::::::::
	960	970	980	990	1000

Function used was FASTA